iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 8 **Issue:** VI **Month of publication:** June 2020

DOI: http://doi.org/10.22214/ijraset.2020.6241

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429
Volume 8 Issue VI June 2020- Available at www.ijraset.com

VR Based Tele-Presence Robot using Raspberry Pi

Raigond Vijaylakshmi P[1], Rakshitha G[2], Varna Shetty[3], Priyanka R[4], Agalya P[5]
[1, 2, 3, 4, 5]*Sapthagiri College of Engineering, India*

I. INTRODUCTION

Web technology refers to the means by which computers communicate with each other using markup languages and multimedia packages. It gives us a way to interact with hosted information, like websites. Web technology involves the use of hypertext markup language (HTML) and cascading style sheets (CSS). Web technology has given enterprise businesses a broad scope to enhance their task and database with safety and mobility, so that it can be accessed from any location, all that you'd need is Internet.

Smart villages will serve as complementary engines of economic growth to smart cities producing goods and services for local rural markets as well as high-value-added agricultural and rural industry products for both national and international markets. And they will act as stewards for the environment as well as, in some cases, functioning as ecotourism hubs. Key enablers of these development benefits in smart villages are sustainable electricity supplies and the availability of clean and efficient appliances for cooking. Smart village concept may play crucial role in maintaining the balance between the development of rural and urban areas and help to reduce migration of rural population in urban areas. . Urban population density is increasing in uncontrolled manner, while the numbers of cities are still inadequate to accommodate the migrating population from villages. This needs to be reversed and suitably managed to improve quality of life in Indian cities. The concept of "Smart Village" will also address the multiple challenges such as unplanned urbanization, under-development of villages, migration for economic pursuits, better standard of living etc.

II. SYSTEM ANALYSIS

A. Literature Survey

1) Existing System

a) This article examines community-driven multiple use water services (MUS) as pioneered by the Rural Village Water Resources Management Project (RVWRMP) in the Far and Mid-Western development regions of Nepal.

b) This study explores the first-hand lessons learned in the RVWRMP in Nepal since 2006. This project is embedded within the local government.

c) Key project entry points are decentralisation, participation and empowerment. This article reflects how the community-managed systems are used for multiple uses whether they were designed for it or not.

B. Proposed System

The aim of the proposed system is to develop a system of improved facilities. The proposed system can overcome all the limitations of the existing system. The system reduces the manual work.

a) Formulate the growth strategies for the village Providing quality utility services like power, water, sanitation, and essential services such as education, healthcare, transportation, infrastructure (roads, railways, buildings, equipment) etc must be the primary strategy for the development of every village.

b) The next step is to formulate Growth Strategies for the village to make it self-sufficient taking into account the investment climate and other factors. Strategic questions such as what the kind of SMEs needs to be developed in the village, the kind of vocational training to be given to the residents of the village and how to attract investment as well as entrepreneurs must be formulated and answered.

1) Scope of the Project

a) Economic Component: This component will include local administration and economic factors. It will cover governance models, bandwidth, mobility, cloud computing, entrepreneurship

b) Environmental Component: This component will address the issues related to resources and infrastructures available at local level. It may covers cleaner technologies, public and alternative transportation, green spaces, smart growth, climate change etc.

c) Social Component: This component may address issues related to community life, participatory democracy, social innovation, proximity services etc

2) Aim of the project

a) To maintain a record of charity group of government funds.
b) For development of health,education and farming practices of people.
c) Help the member to collaborate,plan assess and implement different activities.
d) To understand a database design requried for village management system.

III. REQUIREMENT SPECIFICATIONS

A. System Requirements

This section provides software requirements to a level of detail sufficient to enable the system and testers to test the system.

1) Hardware Configuration

a) Processor
b) RAM
: Dual core and above
: 1GB and above
Hard Disk Utilization : 40 GB and above
➢ Input Devices ➢ Output Devices
: Mouse, keyboard, etc.
: Monitor, Printer, etc.

2) Software Configuration

a) Operating system : Windows
b) Front End: HTML and PHP
c) Back End: MySQL (XampServer)
d) Browser: Chrome.

B. Development Environment

1) HTML [Hypertext Markup Language]

a) It is the standard markup language for creating web pages and web applications with Cascading Style Sheets (CSS) and JavaScript.
b) Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages.
c) HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.
d) HTML elements are the building blocks of HTML pages, with HTML constructs, images and other objects, such as interactive forms, may be embedded into the rendered page.

2) CSS [Cascading Style Sheets]

a) It is a style sheet language used for describing the presentation of a document written in a mark-up language.
b) Although most often used to set the visual style of web pages and user interfaces written in HTML the language can be applied to any document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media.
c) Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging web pages, user interfaces for web applications, and user interfaces for many mobile applications.
d) CSS is designed primarily to enable the separation of presentation and content, including aspects such as the layout, colours, and fonts.

3) JS [JavaScript]

a) It is a high-level, dynamic, weakly typed, prototype-based, multi-paradigm, and interpreted programming language.
b) Alongside HTML and CSS, JavaScript is one of the three cores technologies of World Wide Web content production.
c) It is used to make webpages interactive and provide online programs, including video games.
d) The majority of websites employ it, and all modern web browsers support it without the need for plug-ins by means of a built-in JavaScript engine.

e) Each of the many JavaScript engines represent a different implementation of JavaScript, all based on the ECMA Script specification, with some engines not supporting the spec fully, and with many engines supporting additional features beyond ECMA

4) Bootstrap

a) Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

b) It is a free and open-source front-end framework for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions. Unlike many earlier web frameworks, it concerns itself with front-end development only.

5) PHP [Hypertext Pre-processor]

a) It is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language.

b) PHP was originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by the PHP Development Team.

c) PHP code may be embedded into HTML or HTML5 markup, or it can be used incombination with various web template systems, web content management systems and web frameworks.

d) PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable.

e) The web server software combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page.

f) PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

6) MySQL Server

a) It is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and SQL ", the abbreviation for Structured Query Language.

b) The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements.

c) MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. For proprietary use, several paid editions are available, and offer additional functionality.

d) The MySQL server package will install the MySQL database server which can interact with using a MySQL client.

User can use the MySQL client to send commands to any MySQL server; on a remote computer.

IV. SYSTEM IMPLEMENTATION

A. Modules Description

1) Government Module: In this module the government official can login do the following:

a) Choose the details he wants to display on the screen

b) Provide Funds to the villagers by providing the appropriate government id. o Can directly communicate with the villagers and solve the issues.

2) Village Module: In this module users can login as villagers and do the following : o They can select in which field they want help from the government, whether it’s Health, food or financial help.

a) The user can provide their details in the required field and seek help.

V. RESULTS

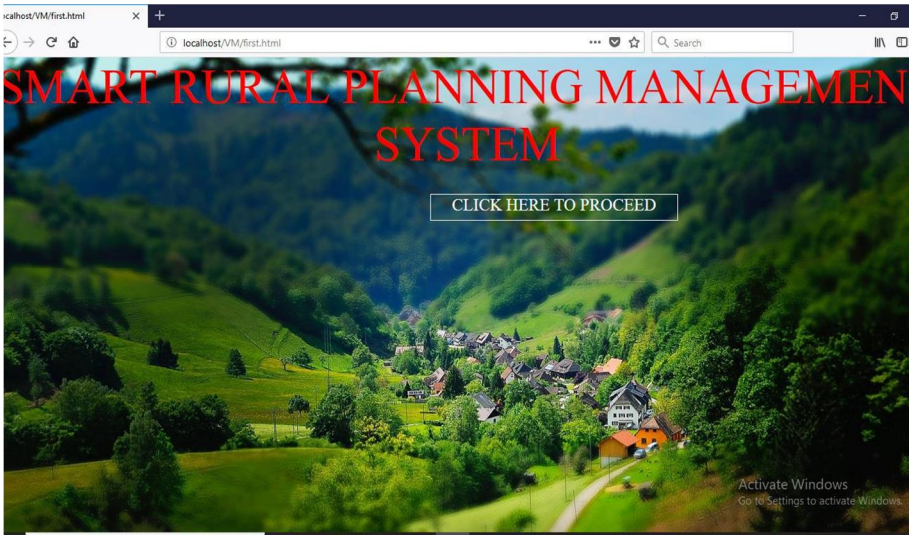


Fig 5.1

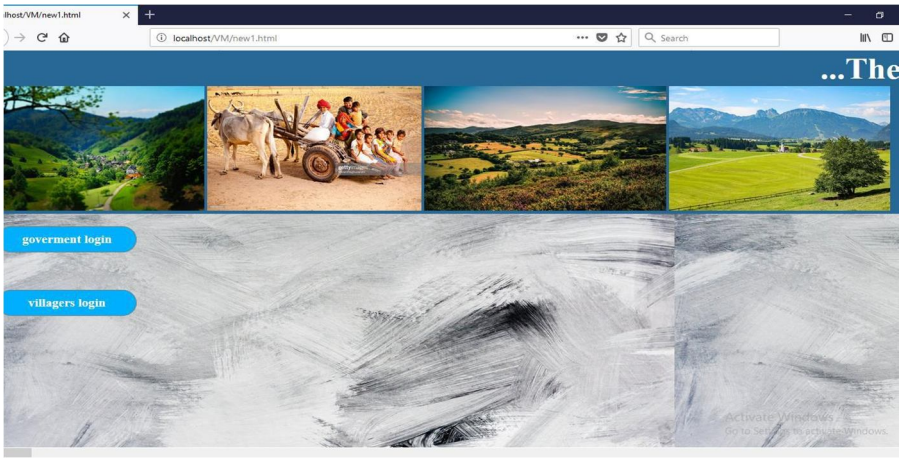


Fig 5.2

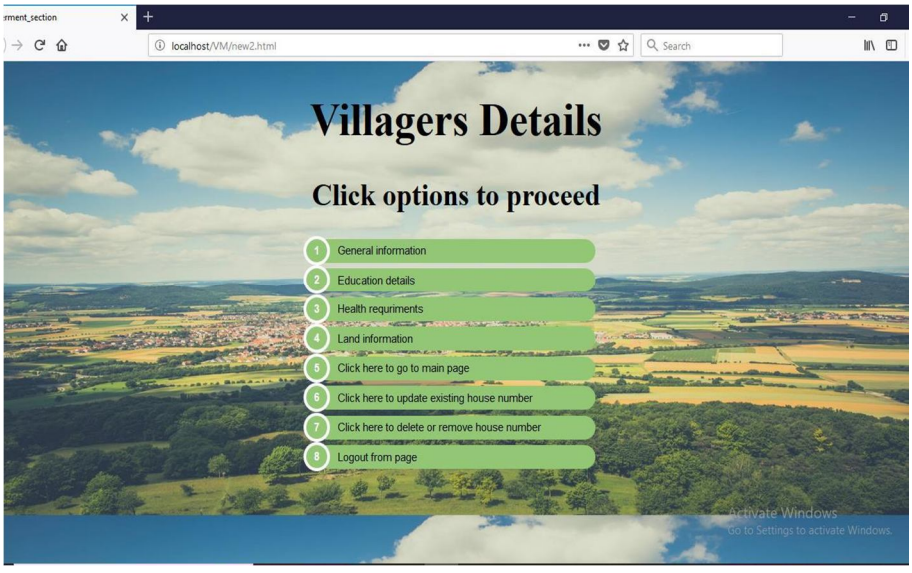


Fig 5.3

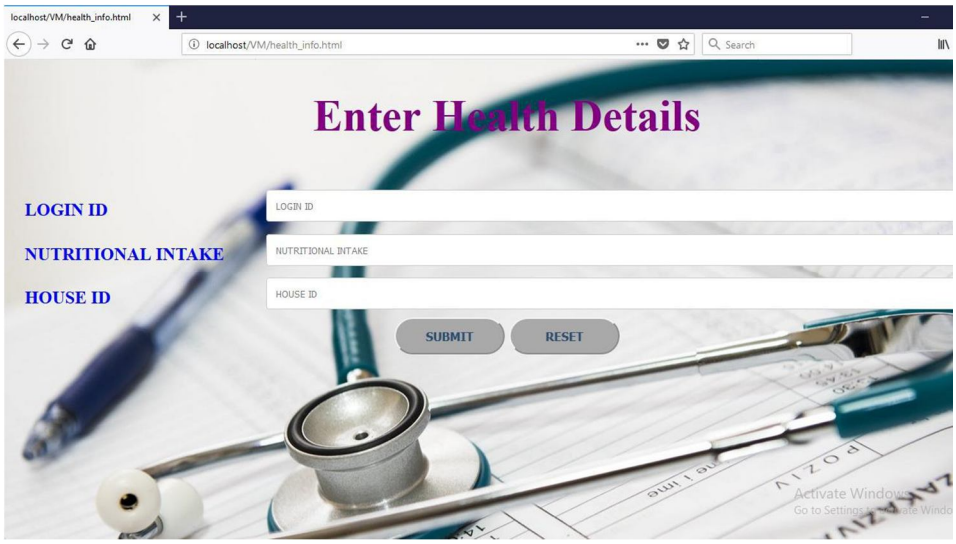


Fig 5.4

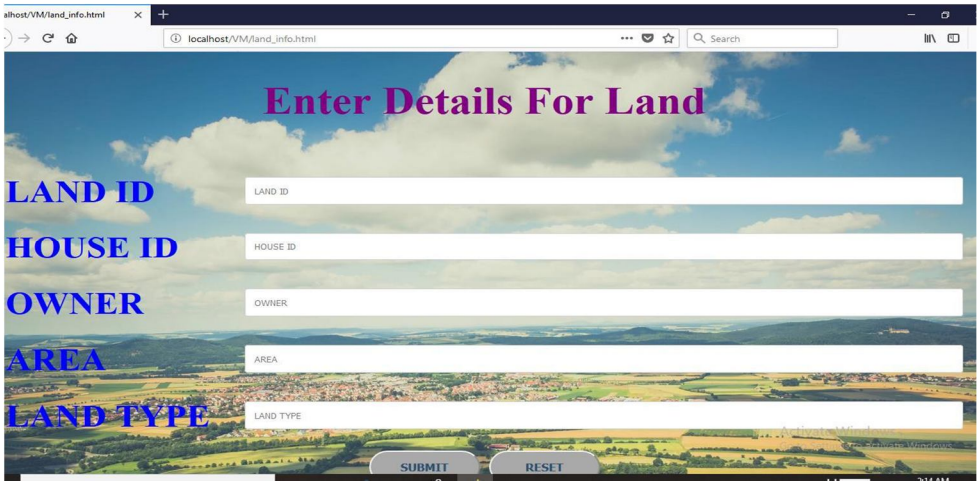


Fig 5.5

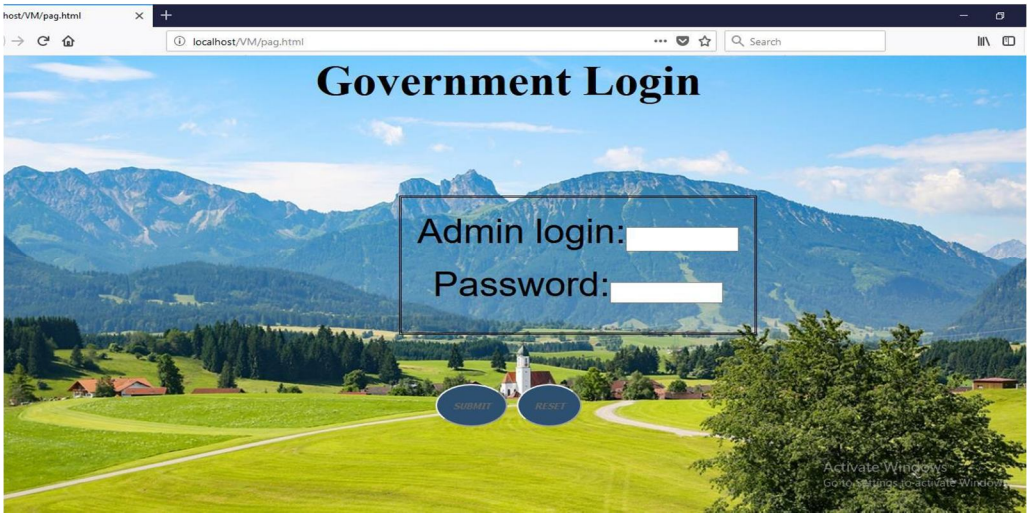


Fig 5.6

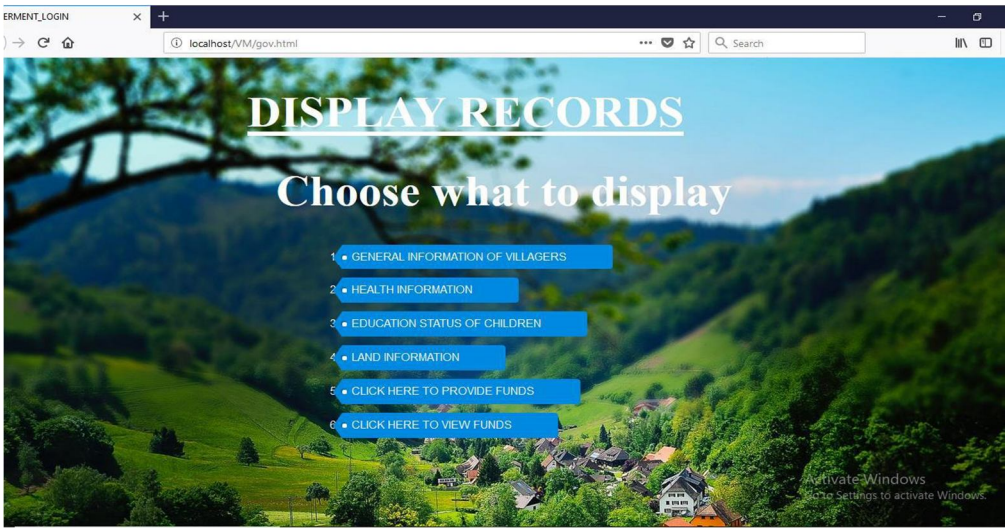


Fig 5.7

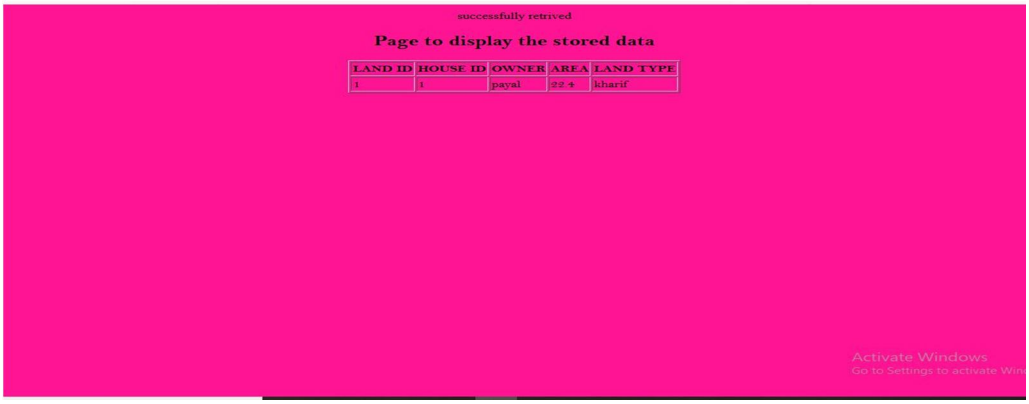


Fig 5.8

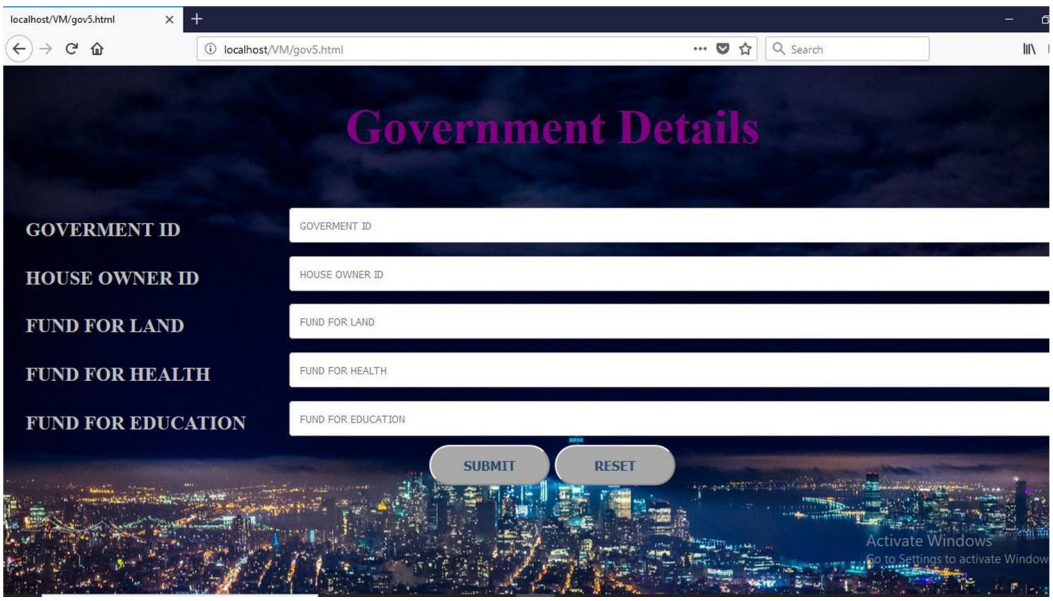


Fig 5.9

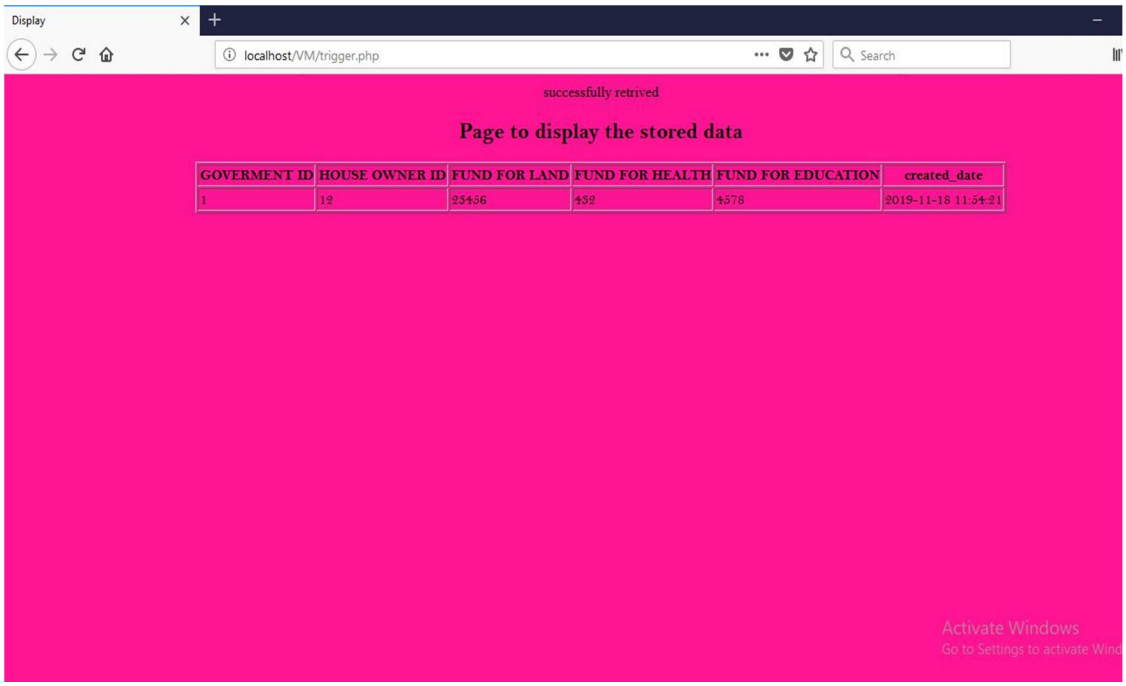


Fig 5.10

VI. CONCLUSION AND FUTURE WORK

A. Conclusion

An application has been developed using the concepts of Html, CSS, Javascript and MySQL database and the connectivity via PHP. The main aim is to meet the requirements of the organization, thereby ensuring the quality of performance.

The basic price per person can be calculated for the event by booking that event. To conclude this, software provides a user friendly Interface.

.A specially designed suitable framework for rural areas on the grounds of Science, Technology, Engineering, Regulations and Management will play important role to build next generation smart village .

Benefit of the smart village efforts are foreseen to be tremendous .Smart village concept is having high replication potential in other countries of developing world. The concept of smart village may also be extended to small towns and also townships surrounding the big Cities.

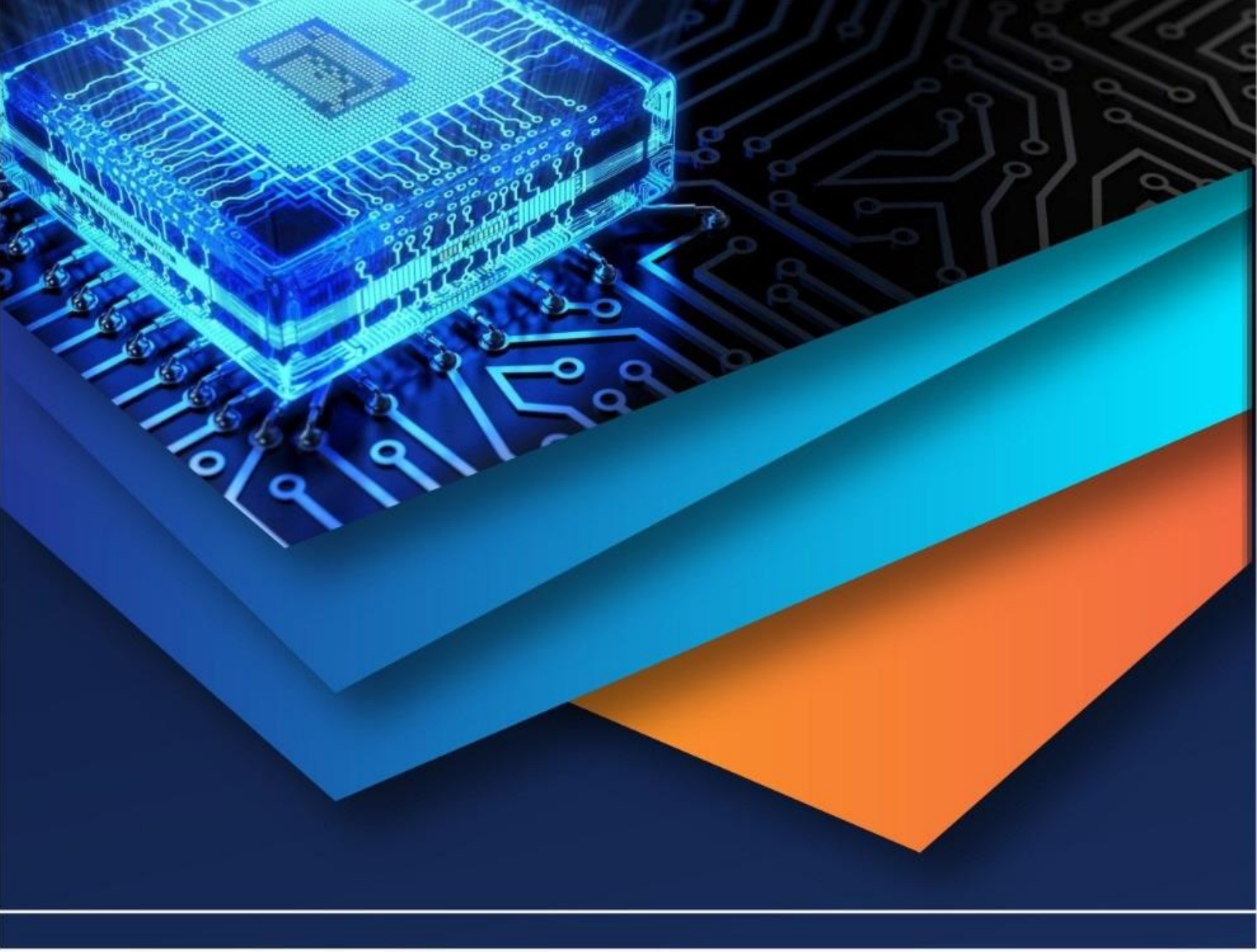
B. Future Work

1) The project made here is just to ensure that this website could be valid in today's real challenging world. Here all the facilities are made and tested.

2) Currently the system works for limited number of administrators to work. In near future it will be extended for many types of policies so that efficiency can be improved and new algorithms will be implemented and provided in order to make online registrations for more secure funds provided by government.

REFERENCES

[1] www.freecodecamp.org
[2] www.sololearn.com
[3] www.youtube.com
[4] www.phppot.com
[5] www.w3schools.com
[6] www.google.com



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY